

Appl. No.: 10/767,181
Art Unit: 3711 Docket No.: B04-01
Reply to Office Action of December 16, 2004

REMARKS

Claims 23-26, 29-32 and 35-42 appear in this application for the Examiner's review and consideration.

Claim 23, 34, 36, and 42 have been amended. In particular, claims 23, 36, and 42 have been amended to recite that the center comprises greater than 2.2 parts pentachlorothiophenol or a salt thereof. Support for this element is found in original claim 34, on page 6, lines 1-5 of the Specification, and in Application No. 09/951,963, now U.S. Patent No. 6,635,716, which was incorporated in the instant application by reference. Claims 23, 36, and 42 have been amended to recite that the golf ball has an outer diameter of about 1.68 inches. Support for this element is found in the Specification, on page 13, lines 4-11.

Claims 27, 28, 33, and 34 have been cancelled without prejudice to Applicants' right to file one or more continuing applications directed to any subject matter not presently claimed.

No new matter has been added by these amendments and additions.

Objection to the Specification

The Specification was objected to for allegedly failing to provide support for some of the subject matter recited in claims 23, 36, and 42. In particular, the Examiner states on page 2 of the Office Action that "the water vapor transmission rate in the specification is for various urethane[s] and not the cover claimed in the instant invention."

Applicant directs the Examiner to page 8, lines 9-12, which clearly states that "the ionomer-metallocene blend used for the cover exhibits a *lower* water vapor transmission rate than a thermoset urethane material." A typical value for urethane materials is listed as 12.62 g/100 in²-day. Therefore, Applicant submits that this language provides unequivocal support for covers being formed from ionomer-metallocene blends having a water vapor transmission rate of *less than* 12.62 g/100 in²-day, as recited in claims 23, 36, and 42.

Additionally, the Specification was objected to for allegedly failing to provide support for some of the subject matter recited in claims 36 and 42. In particular, the Examiner states on page 2 of the Office Action that "the compression for the cover does not include 70." Regarding this objection, Applicant fails to see an element of cover compression in either of claims 36 or 42, or even any of the dependent claims. As such, Applicant traverses this objection as it appears to be moot.

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The objection to the Specification is, therefore, believed to have been overcome. Applicants respectfully request reconsideration and withdrawal thereof.

Rejections Over Sullivan in view of Kennedy, and/or Rajagopalan/Egashira

Claims 23-26, 29-33, and 35-41 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,220,972 to Sullivan *et al.* in view of U.S. Patent No. 6,350,793 to Kennedy, III *et al.* Sullivan is generally directed to golf balls having a thick (≥ 0.142 inches), relatively hard (60-80 Shore D), multi-layer cover for decreased spin, improved distance, and resistance to cracking and fracturing.

It is well held that to establish a *prima facie* case of obviousness, there must be some suggestion or motivation found within the reference(s) to modify or combine the teachings, there must be a reasonable expectation of success, and the reference(s) must teach or suggest all the claim limitations.

Applicant respectfully submits that Sullivan does not disclose or suggest a center having a diameter of about 1.55 inches to about 1.60 inches, as recited in independent claims 23 and 36 of the present invention. The Examiner states on page 3 of the Office Action that Sullivan's "diameter of the core is from 1.538-1.652 inches (golf ball diameter minus cover)," obviously obtained through attempted back-calculation from Sullivan's golf ball diameter of 1.680-1.800 inches (column 4, lines 52-56) and cover thickness of *at least* 0.142 inches (Abstract and column 4, lines 18-19), since Sullivan fails to explicitly state any center diameter. The Examiner's calculation is mistaken, however, since the calculation of core diameter via subtraction of cover thickness requires a subtraction of *two times* the cover thickness because the cover encircles the entire core. A correct calculation of Sullivan's core diameter results in a core of, at best, 1.396-1.516 inches (*i.e.*, $1.8'' - 0.142'' \times 2$), well below and outside of Applicant's range.

Additionally, Sullivan also fails to disclose, or even suggest, a cover layer having a Shore D hardness, as measured on the ball, of less than 58, as recited in claims 23 and 36 of the present invention. The Examiner even acknowledges this fact on page 3 of the Office Action.

Sullivan further *teaches away* from the claimed invention by limiting the hardness of the thick, multi-layer golf ball cover to 60-80 Shore D. It is well held that a *prima facie* case of obviousness can be rebutted if Applicant can show that the cited reference, in any material respect, *teaches away* from the claimed invention. *In re Geisler*, 116 F.3d 1465, 43 U.S.P.Q.2d

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1362, 1365 (Fed. Cir. 1997). The reference may further be said to teach away when a person of ordinary skill in the art, upon reading the reference, would be led in a direction divergent from the path that was taken by Applicant. *Tec Air, Inc. v. Denso Mfg. Mich. Inc.*, 192 F.3d 1353, 1360, 52 U.S.P.Q.2d 1294, 1298 (Fed. Cir. 1999). Sullivan's cover hardness of 60-80 Shore D is completely divergent and non-overlapping with a cover hardness of less than about 58 Shore D, as recited in claims 23 and 36 of the present invention. Sullivan employs such a hard, thick, multi-layer cover in combination with a soft core for the clearly-stated purpose of forming a distance golf ball having low spin and soft feel (see column 2, lines 55-58 and 61-65; column 7, lines 23-39; column 25, lines 16-19). As such, Sullivan explicitly *teaches away* from cover hardness of less than 60 Shore D, let alone less than about 58 Shore D, as claimed in the present invention.

Kennedy is generally directed to a golf ball having a hard core and a "very soft ionomeric cover" crosslinked by irradiation for improved resistance to scuffing, cutting, and heat, and having high spin rate (*i.e.*, enhanced playability, see column 1, line 62 to column 2, line 16). Kennedy does not cure the deficiencies of Sullivan. One of ordinary skill in the art, reading Sullivan or Kennedy, would have no motivation to look to the other reference because they are completely different golf balls – their combination would require a thick cover (0.142 inches), leaving a golf ball core of 1.396 inches, substantially smaller than that claimed by Applicant. Were one skilled in the art to simply ignore Sullivan's teaching of a thick cover layer (and reasons for using such a layer) would mean that Applicant's claims, and not the motivation provided by Sullivan and/or Kennedy, was the reasoning for such selection.

Furthermore, even if Sullivan and Kennedy were combined, the combination still fails to teach or suggest all of the claim limitations of the present invention. Neither reference discloses or suggests a center diameter of about 1.55 inches to about 1.60 inches, the water vapor transmission rate of the cover (which is not inherent without knowing ranges of either component, as now specifically recited in claims 23, 36, and 42), the preferred ranges of ionomer and metallocene polymer, or that the center comprises a halogenated thiophenol, let alone pentachlorothiophenol at a level of greater than 2.2 parts.

Applicant respectfully submits that the rejections under 35 U.S.C. § 103(a) is believed to have been overcome and that the claims are now in condition for allowance.

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Claims 27 and 28 were rejected under 35 U.S.C. § 103(a) over Sullivan in view of Kennedy, and in further view of U.S. Patent No. 5,703,166 to Rajagopalan *et al.* Claims 27 and 28 have been cancelled, rendering this rejection moot. Applicant respectfully submits that the rejection under 35 U.S.C. § 103(a) is believed to have been overcome and that the claims are now in condition for allowance.

Claim 34 was rejected under 35 U.S.C. § 103(a) over Sullivan in view of Kennedy, and in further view of U.S. Patent No. 5,252,652 to Egashira *et al.* Claim 34 has been cancelled, rendering this rejection moot. Applicant respectfully submits that the rejection under 35 U.S.C. § 103(a) is believed to have been overcome and that the claim is now in condition for allowance.

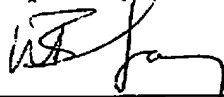
Claim 42 was rejected under 35 U.S.C. § 103(a) over Kennedy in view of Sullivan. Applicant respectfully submits that the combination of Kennedy and Sullivan still fails to recite, disclose, or even suggest all elements recited in claim 42 of the present invention for the reasons set forth above. Applicant respectfully submits that the rejection under 35 U.S.C. § 103(a) is believed to have been overcome and that the claim is now in condition for allowance.

Conclusion

Based on the remarks set forth above, Applicants believe that all of the rejections have been overcome and the claims of the subject application are in condition for allowance. Should the Examiner have any further concerns or believe that a discussion with the Applicants' attorney would further the prosecution of this application, the Examiner is encouraged to call the attorney at the number below.

No fee is believed to be due for this submission. Should any other required fees be due, however, please charge them to Acushnet Company Deposit Account No. 502309.

Respectfully submitted,



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